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The Transatlantic Trade and Investment Partnership and the Role of Computable General Equilibrium Modelling: An Exercise in ‘Managing Fictional Expectations’

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Abstract

Negotiations between the world’s two largest trading partners, the European Union (EU) and the United States (US), on a Transatlantic Trade and Investment Partnership (TTIP) have been on-going since July 2013. Anticipating the controversy the agreement has sparked, EU trade policymakers in the European Commission have put considerable effort into discursively framing the agreement on their terms. Drawing on Computable General Equilibrium (CGE) models of the agreement’s likely impact, the central claim has been that the TTIP promises to deliver much-needed ‘growth and jobs’ without stretching the public purse at a time of austerity. Our main argument in this article, drawing on the insights of the economic sociologist Jens Beckert, is that these CGE models – and the figures they have produced – represent an important exercise in ‘managing of fictional expectations’. The models make overly optimistic predictions about the ability of the EU and US to eliminate regulatory barriers to trade – which are unlikely to be realised in the face of considerable political opposition – and also downplay the potential deregulatory impact of an agreement. Rather than act as a reliable guide to future outcomes, we thus show that these models serve the pro-liberalisation agenda of the European Commission and other advocates of the TTIP.

Keywords: Transatlantic Trade and Investment Partnership (TTIP); Computable General Equilibrium (CGE); ‘fictional expectations’; economic sociology; European Union (EU); trade policy.

1. Introduction

The proposed European Union (EU)-United States (US) free trade agreement (FTA), also known as the Transatlantic Trade and Investment Partnership (TTIP), will potentially represent the world’s most significant bilateral trade deal. While bringing together the world’s two largest economies into a single ‘transatlantic marketplace’ is by no means an entirely new idea, it is the first time that policymakers are seriously seeking to translate it into practice: negotiations have been on-going since July 2013, initially with the aim of completing them ‘within two years’ (Parker and Houlder 2013). There are, however, important political obstacles in the way of achieving the TTIP, obstacles which in the past led to the abandonment of plans for an FTA. When such an agreement was last on the cards in 2004 it was viewed as ‘over ambitious’ and ‘unlikely to be realised’ (Peterson *et al.* 2005: 76-9) against the backdrop of over a decade of transatlantic economic cooperation that had only yielded mixed results (Pollack 2005; Smith 2009).

In this vein, and in the light of past failures to effectively communicate trade policy decisions to the public and other potentially hostile actors (Siles-Brügge 2014: 151-7), EU trade policymakers have realised the importance of discursively framing the agreement on their terms. As a leaked European Commission ‘Issues Paper’ on ‘Communicating on TTIP’ from November 2013 lays out, ‘[s]trong political communication will be essential to the success of the Transatlantic Trade and Investment Partnership (TTIP), both in terms of achieving EU negotiating objectives and of making sure that the agreement is eventually

ratified'. More importantly, the 'aim' of such communication should be 'to define, at this early stage in the negotiations, the terms of the debate by communicating positively about what the TTIP is about (i.e. economic gains and global leadership on trade issues)' (European Commission 2013d). The central message of this 'information' campaign (which has brought together the European Commission and certain pro-liberalisation Member States, including notably the UK) has been that, in a period of economic recession, the TTIP represents 'the cheapest stimulus package you can imagine' (De Gucht 2013), 'a once-in-a-generation prize' that we should be 'determined to seize' (David Cameron, cited in BBC News 2013).

At the heart of this rhetoric lie the claims, repeatedly invoked by the pro-TTIP camp, that the agreement will yield substantial economic gains for both parties (see, for example, European Commission 2013e; De Gucht 2014: 4; Clarke 2014). Drawing on a Commission impact study on the matter (European Commission 2013a), the headline figures are of annual GDP gains of €119bn for the EU (and €95bn for the US), which translates into extra annual disposable income of €545 for a family of four in the EU (or €655 for a family in the US). These figures are derived from two key economic studies on EU-US trade liberalisation contracted by the European Commission (CEPR 2013; ECORYS 2009). These draw on Computable General Equilibrium (CGE) modelling techniques to arrive at estimates, which are then presented by advocates of the TTIP as reasonable *predictions* of the agreement's economic impact. In this, they join a lineage of studies that have modelled the supposedly positive effects of trade liberalisation, most notably of the North American Free Trade Agreement (NAFTA) (see Cypher 1993; Stanford 2003) and the Doha Round of multilateral trade talks (see Scott and Wilkinson 2012).¹

Our central argument in this article, drawing on the insights of the economic sociologist Jens Beckert (2013a,b), is that these CGE models – and the figures they have produced – represent an important exercise in the ‘management of fictional expectations’. Beckert’s notion of ‘fictional expectations’ implies that although these models are shrouded in uncertainty, as the social world is too contingent to be modelled in terms of the assumptions of neoclassical economics, they are presented as reliable predictions of future outcomes. We show how the models make overly optimistic predictions about the ability of the EU and US to eliminate regulatory barriers to trade which are unlikely to be realised in the face of considerable political opposition. Rather than act as a reliable guide to future outcomes, we show that these models serve the pro-liberalisation agenda of the European Commission and other advocates of the TTIP. Actors deploying such models are engaged in an exercise of ‘managing’ fictional expectations by presenting their findings as incontrovertible evidence in favour of the agreement. Moreover, by glossing over the differences in impact that different forms of liberalisation will have in the case of the TTIP – a mutual recognition (hereafter: MR) of standards is more likely to lead to a potential ‘downgrading’ of standards across the Atlantic than regulatory harmonisation – and focusing simply on the gains of ill-defined regulatory ‘liberalisation’, the economic studies have been used to disguise the privileging of interests calling for market access gains over those concerned with social and environmental protection.

Our contribution to the literature is thus three-fold. On the one hand, we offer an up-to-date complement to the myriad of studies that have focused on the obstacles to and modalities of transatlantic regulatory cooperation and are only beginning to study the TTIP (see, for example, Pollack 2005; Smith 2009; Pollack and Shaffer 2009; on the TTIP, see Lester and Barbee 2011). We also add grist to the mill of accounts which have pointed to the strategic

use of economic ideas, such as the notion that the EU has no choice but to liberalise in a globalised economy, to legitimate external trade liberalisation in the EU in the wake of the crisis (Siles-Brügge 2014; De Ville and Orbie 2014). Against a rising tide of opposition to the TTIP from civil society and some Member States over (amongst other things) the agreement's likely social and environmental impact (De Ville and Siles-Brügge 2014), the Commission clearly hopes that repeatedly invoking the (supposed) economic benefits of the agreement is likely to serve as an ideational counterweight in much the same way that CGE models strengthened (at least for a time) the discursive armoury of those pushing for liberalisation in the case of NAFTA and the Doha Round. Finally, we point to the importance of engaging critically with economics and quantification in the field of IPE (see Blyth 2009; Underhill 2009).

The remainder of this article is structured as follows. In section 2 we introduce Beckett's notion of 'managing fictional expectations' and show how it can be applied to CGE models. In section 3 we turn to the history of transatlantic economic relations and suggest why past efforts at EU-US regulatory cooperation have struggled to get past anything but limited MR. In section 4 we turn our attention to the impact assessment study used by the Commission to justify the TTIP negotiations and reveal the Commission's preference for MR as a means to deliver market access gains for EU business interests. In section 5 we then focus on how the impact assessment – and the CGE models on which it relies – papers over the uncertain liberalisation gains of the TTIP and serves to disguise the Commission's MR agenda, with its potentially problematic consequences for levels of social and environmental protection in the EU. We conclude the article in section 6, including some reflections on the relationship between quantification, economics and IPE.

2. Managing ‘fictional expectations’: a political economy of Computable General Equilibrium modelling

Within the so-called ‘ideational turn’ to political economy (for a review, see Bell 2011), the work of Mark Blyth (2002, 2010) has been particularly influential. He argues that actors are unable to *rationaly* determine their interests and instead rely on ideas to navigate the treacherously uncertain waters of the social world. While Blyth’s work has been taken to be the reference point for an allegedly ‘new’ stream of ‘constructivist IPE’ (see Abdelal *et al.* 2010), it has its roots in the (slightly) older tradition of the ‘new economic sociology’ (for a review, see Convert and Heilbron 2005). Much as the ‘ideational turn’ in political economy has critiqued rationalist research programmes in political science and their exogenous models of interest-formation, so the ‘new economic sociology’ has sought to re-assert a sociological understanding of the market in the wake of the rise of neoclassical economics and its atomised view of market relations. More specifically, Blyth draws on the work of the economic sociologist Jens Beckert (1996, 1997), who argues that managing and reducing uncertainty is the underlying feature of markets. However, the premise of ‘fundamental’ or ‘radical’ uncertainty underpinning such work has been criticised for providing insufficient guidance in determining ‘*why* certain ideas matter’ (Siles-Brügge 2014: 34-6; see also Bieler and Morton 2008), or, as Beckert (2013a: 222) recently put it, how actors ‘*interpret* the social situation’. In other words, and to use the metaphor from above, what drives actors to choose one current rather than another when navigating the uncertain waters of the social world?

Beckert’s recent solution to this issue is to put forward this idea of ‘fictional expectations’, or ‘imaginaries of future situations that provide orientation in decision-making *despite* the uncertainty inherent in the situation’ (Beckert 2013a: 222, emphasis in the original). Beckert (2013a: 225-6) draws an important analogy here to literary texts: both literature and fictional

expectations involve the ‘suspension of disbelief’ on behalf of the reader/social participant. That said, in the case of the former this is down to the choice of the reader, who may well take enjoyment from learning about the fictional exploits of *Tom Sawyer*, while ‘fictional expectations’ are a coping mechanism for actors facing an uncertain future: ‘represent[ing] future events *as if* they were true, [they] mak[e] actors capable of acting purposefully [...] even though this future is indeed unknown, unpredictable, and therefore only *pretended* in the fictional expectations’ (Beckert 2013a: 226, emphasis in the original). Fictional expectations shape economic decision-making not just by providing a series of static predictions of the future, but more broadly by providing ‘a story of how the present will be transformed through several causally linked steps into the depicted future state’ (Beckert 2013a: 226). Focusing on whether such narratives are true or false, however, is missing the point; they are ‘*necessarily* wrong because the future cannot be foreseen’ (Beckert 2013a: 226, emphasis in the original). In this vein, fictional expectations ‘remain ever fragile because the images can be contested and the actual future development remains open’ (Beckert 2013a: 225).

Of course, ‘fictional expectations’ – much like Blyth’s ‘ideas’ – are necessary for actors to navigate the inherently uncertain social world. It would be difficult, for example, to imagine a firm without some form of business plan. But they also play a role in the realm of political contestation. As Beckert highlights in a subsequent article, ‘[a]ctors have different interests regarding prevailing expectations and will therefore try to influence them’ (Beckert 2013b: 326). Our argument here is that the idea of ‘managing fictional expectations’ can be seen as a useful contribution to the growing literature on the role of ‘strategic’ or ‘communicative’ discourse in political economy, whose purpose it is to ‘communicate [policy decisions] successfully to the public at large’ (Schmidt 2002: 234; see also, amongst others, Hay and

Rosamond 2002; Watson and Hay 2003; De Ville and Orbie 2014; Siles-Brügge 2014). Such accounts have, in much the same way as Beckert, emphasised the strategic agency of specific actors deploying particular ideas about the economy to further their ends. Beckert's focus on how such actors conceptualise the future allows us to turn to a specific form of strategic imaginary, namely the economic modelling that is so crucial in shaping economic decision-making. As Lorenzo Fioramonti claims in his recent book *How Numbers Rule the World* (2014: 6), 'numbers have been used and abused in governance processes to entrench the power of markets and undermine public debate'. We are of course not seeking to reject quantification or economics in a sweeping way, as both can offer important insights to the field of IPE that some 'critical' political economists (especially within the so-called 'British School') are often quick to dismiss (on the 'British School', see Cohen 2007; on the latter issue, see Blyth 2009; Underhill 2009: 350-5). Rather, in the rest of the section, we will show how elites can draw on the imaginary provided by certain forms of economic forecasting, notably computable general equilibrium (CGE) modelling, which (as will become apparent) has also been criticised *within* the economics profession.

CGE models take the Arrow-Debreu model of general equilibrium model at the heart of modern neoclassical economics as their starting point (see Arrow and Debreu 1954; for a critique see Ackerman and Nadal 2004). They thus assume the existence of 'macroeconomic general equilibrium links among incomes of various groups, the pattern of demand, the balance of payments and a multisector production structure' (Thissen 1998: 2). In such a situation there is no excess demand and all markets clear under conditions of perfect competition. As their name suggests, CGE models must also be 'computable', that is, they must involve 'numerical' data and results (Grassini 2007: 317). Starting with the work of Leif Johansen (1960), the availability of increasingly powerful computers capable of more

sophisticated computations has allowed such models to grow in importance within economics (for a history of CGE modelling, see Dixon and Rimmer 2010). They have become, in this way, particularly influential when it comes to measuring the economic ‘welfare’ implications of policy decisions, including the effects of trade liberalisation – where the creation of the Global Trade Analysis Project (GTAP) in 1993 was instrumental to the improved quantification of trade policy impacts (Scott 2008: 93) – and the consequences of economic decisions on various other domains such as social welfare and the environment/sustainability (see Decanio 2005; Ackerman and Gallagher 2004; George 2010).

As noted above, CGE models have been the subject of some critique within economics, but this has generally failed to appreciate their broader political significance (e.g. Taylor and von Armin 2006; Scrieciu 2007; for authors that do engage with this, see Cypher 1993; Scott and Wilkinson 2012). In contrast, our argument is that the use of CGE modelling should be conceptualised as an important exercise in the management of fictional expectations. CGE models correspond to such expectations in that, while presented as reliable forecasts, they are underpinned by considerable uncertainty. This is first and foremost a product of the simplifying modelling assumptions taken from general equilibrium theory that individuals are rational optimisers and that all markets clear. With respect to the first, this ignores that individuals are often driven by a ‘more complex set of values’ (Scrieciu 2007: 680), while there are also often information asymmetries between parties involved in market transactions (see the seminal piece by Akerlof 1970). General equilibrium conditions, moreover, are unlikely to be met in the real world, where labour and product markets rarely all ‘clear’ at a given moment in time (Ackerman 2004: 16; Grassini 2007). Indeed, the Sonnenschein-Mantel-Debreu theorem (one of whose authors was also one of the fathers of general equilibrium theory, Gérard Debreu himself) mathematically demonstrates that (even

assuming perfect rationality) it is axiomatically impossible to arrive at a *unique* equilibrium point in the macroeconomy by scaling up individual market equilibria (Watson 2014: 22-4). Thus, as one experienced modeller, Clive George, has ultimately noted, '[e]conomic models are limited in what they are capable of modelling, and require many simplifying assumptions and approximations [...] This limits the accuracy and reliability of the findings'. Moreover, George highlights how policymakers are willing to accept an extremely high degree of uncertainty: '[i]n some cases, the uncertainty is bigger than the number itself, such that a number predicted to be positive could easily be negative' (George 2010: 25).

This apparently wanton disregard for the accuracy of the predictions points to how CGE models are used as a political tool. They often generate a headline figure or series of statistics that are likely to be widely quoted by policymakers and politicians in defence of particular policy decisions: the TTIP is a case in point. However, aside from these widely publicised numbers, CGE models suffer from a remarkable lack of transparency, making them hard to scrutinise by the lay reader (Decanio 2005: 423). This 'black-box feel' to CGE models (Piermantini and Teh 2005: 10) serves to mask the incredible uncertainty underpinning the modelling. To use Beckert's (2013a) turn of phrase, we are willing to 'suspend our disbelief' because the models seem 'plausible', with their inherent uncertainty and fragility shielded from public view. However, if we 'open up' the 'black box' of the CGE model, we can begin to discern in what ways CGE models skew the terms of economic debate. Drawing on Ross McKittrick's (1998) categorisation of the information contained within CGE models – 'analytical' (relating to underlying assumptions); 'functional' (relating to how the model is specified algebraically) and 'numerical' (relating to the calibration of the models, such as the magnitude of coefficients in the model specification) – we can see how

the models themselves privilege certain interpretations of socioeconomic interaction and can thus be used as tools to push a particular political economic agenda.²

Beginning with their underlying assumptions (i.e. 'analytical' model information), it is clear that these privilege a particular *weltanschauung*. As a number of critics have noted, the Arrow-Debreu model of general equilibrium appears to be agnostic on the question of equity, privileging the Pareto optimality and efficiency that results from supposedly perfectly competitive markets in equilibrium (Ackerman 2004; DeCanio 2005: 420-1). This finds its way into the writing of CGE modellers. Christoph Böhringer and Andreas Löschel (2006: 50), in a key piece advocating the use of such techniques to measure the environmental impact of economic policy decisions, note that 'the decisions how to resolve potential trade-offs [between equity and efficiency] must be taken on the basis of societal values and political decisions'. No calculations can, however, be mustered for such assessments, privileging the notion of economic efficiency, for which economic models can be rallied. To refer again to Fioramonti (2014: 9), '[m]arkets [...] are more malleable to measurement' than 'social relations and the natural world'. In a similar vein, CGE models are also largely static: they measure the difference between two equilibrium points (at t_1 and t_2) without considering the mechanism of adjustment between them (George 2010: 24-5). Much like its microeconomic foundations, this *static* bias downplays the significance of broader intervening environmental and social *adjustment* processes and reifies the idealised 'general equilibrium' outcome of smoothly operating competitive markets that generate Pareto efficient outcomes (Scricciu 2007: 681-2).

Such problems are underscored by the form that CGE models often take (in other words, by the 'functional' information they contain). There is a preference amongst certain CGE

modellers for a 'consistent' approach to modelling social and environmental 'costs' within a 'single integrated [...] framework [where] data and functional relationships from other models must be condensed and synthesised in a way compatible to the structure of the core model', rather than a 'soft-link' approach where multiple models are run simultaneously (Böhringer and Löschel 2006: 59-60; see also Kemfert 2002; Hanson and Leitner 2004). Given that such models are presented as powerful predictors of future developments (see above), their parsimony, a product of the simplifying assumptions of general equilibrium theory, requires that other measures/models be *adapted* to their strictures. Much as Ben Fine (1999) writes of a 'colonisation' of the social sciences by economics, here we can speak of an *absorption* of alternative forms of modelling – such as the more multi-faceted Sustainability Impact Assessment (SIA) methodology developed by Colin Kirkpatrick *et al.* (1999) which includes not only econometric modelling but also case study and causal chain analysis – by the increasingly widespread CGE. This works within the static, microeconomic framework noted above, amplifying the bias towards seeing social and environmental issues in terms of economic 'trade-offs'.

This brings us to the final way in which CGE models introduce biases. As highlighted by McKittrick (1998), the degree to which both functional form but also parameter values (i.e. 'numerical' information) can influence the results of CGE models raises important concerns for the validity of CGE modelling. This puts considerable power into the hands of the researcher. For example, if they posit a positive relationship between economic growth and poverty reduction then this can be emphasised in particular models through the use of generous parameters for the growth elasticity of poverty (Scricciu 2007: 681), or by including certain measures of poverty reduction (e.g. income per capita) rather than others (e.g. income inequality). As a result, even *The Economist* (2006, cited in Scricciu 2007: 681), which

is usually wont to cite such studies in an authoritative manner, notes (in reference to the relationship between trade and productivity/growth) that '[i]f the [CGE] modeller believes that trade raises productivity and growth [...] then the model's results will mechanically confirm this'.

3. The rocky road of transatlantic regulatory cooperation

Having established how CGE models can be used in the management of fictional expectations, this section illustrates why advocates of TTIP might have deemed manufacturing optimistic expectations about the consequences of an EU-US trade agreement necessary in the light of the patchy record of cooperation so far. Attempts at establishing a transatlantic market have been made on repeated occasions since the end of the Cold War. From this moment in time, American and European political leaders sought to redefine their relationship in broader terms than its traditional security footing (Steffenson 2005: 30; Fröhlich 2012). Indeed, in 1990 the EU and the US for the first time institutionalised their bilateral relationship with the Transatlantic Declaration, committing to cooperation on economic, cultural and security issues. While its content has been described as 'minimalist' (Peterson 1996), the declaration established an institutional framework for meetings at different levels. The results soon proved disappointing, however, due to a lack of interest by Member States, especially France (Steffenson 2005: 34) and because the Commission was anxious to preserve the EU's own identity before embarking on transatlantic cooperation (Featherstone and Ginsberg 1996: 32).

However, a number of dramatic events both outside and within the economic sphere – including the Gulf and Bosnian Wars, a series of transatlantic disputes during the Uruguay Round of global trade talks and looming trade wars on (amongst others) bananas, beef and

aircraft – convinced Atlanticists that a more effective partnership was needed. Realising that a Transatlantic Free Trade Area (TAFTA) would be too sensitive (Steffenson 2005: 36), in 1995 the EU and the US agreed on the New Transatlantic Agenda (NTA). The main substantive outcomes of the NTA were mutual recognition agreements (MRAs) for six sectors,³ which were signed in 1997. These did not go as far as real or ‘enhanced’ MR, defined as the reciprocal and simultaneous acceptance of the counterpart’s regulatory system (Nicolaidis 1996), but were limited to the elimination of duplicate certification procedures (more on this below). These ‘traditional’ MRAs notwithstanding, there was disappointment with the level of achievement in the economic chapter of the NTA. Therefore, in 1998 Leon Brittan (the EU’s Trade Commissioner) sought to inject new momentum with a proposal for a New Transatlantic Marketplace that would remove tariffs as well as non-tariff barriers, establish a transatlantic market for services, government procurement and investment and develop new rules for intellectual property rights (Pollack and Shaffer 2001:16). However, this was again blocked by Member States in the Council of Ministers, once more led by France. Consequently, with Atlanticists eager to deliver something, a less ambitious and vaguer ‘Transatlantic Economic Partnership’ was agreed in 1998. This tried to build the transatlantic market more incrementally, mainly by further reducing regulatory barriers in a number of new goods sectors, including full equivalence agreements for marine safety, as well as by extending the MRAs to services. However, it soon turned out that both negotiations on new sectors as well as the implementation of the early MRAs were stalled (Pollack and Shaffer 2001: 298). This was due to obstruction on both sides, but especially by the US Food and Drug Administration (FDA) and the Occupational Safety and Health Administration (OSHA), which fought against the initiative and delayed the recognition of European standards (Steffenson 2005: 123-40; Pollack 2005: 909). The EU and the US have since tried to reinvigorate this process of regulatory

cooperation many times in the 2000s but this has again only led to very limited results.⁴ The reasons for this have been summarized by an official from the European Commission's DG Trade as follows: 'the Transatlantic Market is not in one single legal context [...] there is no mechanism to force consensus [...] the TEC [Transatlantic Economic Council] has no authority to impose an alignment and to arbitrate in case of disagreement' (cited in Lütz 2011: ix).

Why have attempts since the end 1990s to achieve such closer Transatlantic economic cooperation failed, notwithstanding the thereto more conducive global structural context (Smith 2009)? According to one of the most established observers of transatlantic economic cooperation, the reasons for this are persistent cultural, administrative and political differences across both parties' regulatory systems, leading him (in the mid-2000s) to the prediction that '[a] legally binding treaty or a fully-fledged transatlantic free trade agreement [...] are unlikely to be realized in the near future in the face of difficult domestic ratification requirements and predictable domestic opposition on both sides of the Atlantic' (Pollack 2005: 916; see also Peterson *et al.* 2005: 76). In sum, the EU and the US have for two decades tried in vain to establish a transatlantic market built on regulatory cooperation, because of a persistent lack of mutual trust among regulators and politicians, in interaction with high decision-making thresholds. This has been admitted by the European Commission itself in its impact assessment of TTIP: 'The 1999 agreement on mutual recognition between the European Community and the United States of America has not lived up to initial expectations [...] because, at the time, it was not possible for regulators to build the degree of mutual confidence necessary to bring the agreement into operation' (European Commission 2013a: 19). When two authorities in the field of transatlantic regulatory cooperation, Jim Rollo and Simon Evenett, testified before the UK's House of Lords' Select Committee on the

European Union about their evaluation of the history and future feasibility of regulatory cooperation, they concluded, respectively, that ‘mutual recognition agreements that were made in the 1990s and so on [...] have not worked well in the transatlantic context and have not expanded fast’ and that ‘[g]iven that background, we should not be surprised to see that the talk about regulatory cooperation initiatives is beginning to fizzle out in the context of TTIP’ (House of Lords 2013: 3-4). In this vein, and to grasp the political obstacles to regulatory cooperation expected to re-emerge in the TTIP, it is essential to look into the different modes of regulatory cooperation that were behind these past difficulties.

Understanding different modes of regulatory cooperation

We begin by discussing the differences between MR and harmonisation. Broadly, MR can be defined as ‘creating conditions under which participating parties commit to the principle that if a product or a service can be sold lawfully in one jurisdiction, it can be sold lawfully in any other participating jurisdiction’ (Nicolaidis and Shaffer 2005: 264). As a trading rule managing regulatory divergence, MR is very different from ‘national treatment’, which ‘provides that a host state is only prohibited from applying discriminatory standards to foreign products and services, and is otherwise free to set the standards that it deems appropriate’ (Nicolaidis and Shaffer 2005: 269). When the national treatment principle prevails, regulatory diversity is simply left untouched and no convergence mechanism is attempted. Somewhere in the middle lies harmonisation, ‘where diversity is overcome by finding a common denominator’ (Schmidt 2007: 261) by adopting identical regulatory obligations *ex ante*.

These approaches differ fundamentally in the way they let politics prevail above the market. With national treatment (no regulatory cooperation), one has the primacy of (national)

politics, while with MR, there is primacy of the market. With harmonisation, political governance of the market is reinstated at the supranational level. As a result, Joel Trachtman (2007: 783) argues that '[mutual] recognition is by its nature purely deregulatory' (see also Grahl and Teague 1990). He notes that MR is only desirable when accompanied by essential harmonisation, i.e. an agreed applicable minimum standard, as within the EU's Single Market. Above this threshold, MR applies as states may still apply higher standards to their own suppliers but not to ones of a partner country. According to Trachtman, regulatory competition will, however, bring about convergence towards the agreed minimum standard, or the least demanding rule, if MR is not underpinned by essential harmonisation. In this vein, Miguel Poiars Maduro (2007: 822) concludes that the political viability as well as the consequences of MR depend on 'a certain degree of policy and systems identity between the participating states [and also,] while attempting to promote mutual trust between the participants [, ...] on the pre-existence of such mutual trust'. As noted above, it is precisely the lack of such 'systems identity' and 'mutual trust' between the EU and US in their various attempts at regulatory cooperation that has been seen as the main reason for repeated failures to establish a transatlantic market. Because of this lack of confidence in the equivalence of EU and US regulatory systems, opponents of MR fear, in line with Trachtman's arguments, that it will lead to a 'race-to-the-bottom' (see, for example, CEE Bank Watch Network *et al.* 2014). Of course, we are not claiming that this is necessarily what will occur in the case of TTIP, but rather that MR is far more *likely* to produce such an outcome (or at the very least, put some downward pressure on standards) than a harmonisation of regulations.

At this juncture, it is worth turning to consider the important differences that exist within MR itself and how these point to the difficulties of the Commission's agenda in the TTIP.

The mode of regulatory cooperation that the EU and the US pursued in the past was a shallow type of MR. This did not involve a MR of regulations as such ('enhanced' MR) but rather *only* a recognition of conformity assessment bodies that certify, monitor and enforce these (host state) standards ('traditional' MR). Illustratively, when the European Commission itself took stock of the history of regulatory cooperation in 2004, it concluded that the 'traditional' type of MRA 'has proven difficult to negotiate and even more difficult to implement', and that, consequently, 'it is not worth pursuing new negotiations on this type of MRA [while] the "enhanced" type MRA [...] is the one offering the best prospects of implementation and trade facilitation' (European Commission 2004: 3).⁵ However, as the enhanced type of MRA is much more politically intrusive, there is much reason for doubting that the EU and the US will succeed in agreeing to a more ambitious type of regulatory convergence. After all, the more shallow alternative already faced considerable difficulties, as argued by numerous scholars of transatlantic economic relations (see above). In the next two sections we illustrate how the Commission has papered over the questions raised by this past and patchy record of transatlantic regulatory cooperation. How likely is regulatory cooperation and through which modes will it be pursued? And what are its economic, social and democratic implications? But first, we need to provide an overview of the trade impact assessment used to 'sell' the TTIP.

4. The TTIP Impact Assessment and the Commission's preference for mutual recognition

The current set of transatlantic trade negotiations trace their origin to a summit in November 2011 between US President Barack Obama and European Council President Herman Van Rompuy. This set up a High Level Working Group on Jobs and Growth (HLWG), led by the European Commission's DG Trade and the Office of the United States Trade Representative, and which was tasked with identifying how increased trade and investment might

contribute to job creation, economic growth and competitiveness (HLWG 2013). Its final report was published in February 2013 and concluded that ‘a comprehensive agreement, which addresses a broad range of bilateral trade and investment issues, including regulatory issues, and contributes to the development of global rules, would provide the most significant mutual benefit of the various options considered’ (HLWG 2013: 5).

On the EU side, this analysis was complemented by an extensive economic study on the potential economic impact of liberalising ‘Non-Tariff Measures in EU-US Trade and Investment’ (ECORYS 2009), which fed into a broader study by the Centre for Economic Policy Research on ‘Reducing Transatlantic Barriers to Trade and Investment: An Economic Assessment’ which covered both Non-Tariff Measures (NTMs) and tariffs (CEPR 2013). These were based on the widely used methodology of the GTAP, at the heart of numerous CGE models of the Doha Round (Scott 2008: 93; Scott and Wilkinson 2012: 15), which involves fairly standard general equilibrium assumptions: ‘[p]rices on goods and factors adjust until all markets are simultaneously in (general) equilibrium’ (Francois *et al.* 2005: 364, cited in Raza *et al.* 2014: 38). The results of the CEPR study were then the basis of a European Commission Impact Assessment, published in March 2013 (European Commission 2013a).

This identified three policy options for the future transatlantic trade policy: a baseline scenario without any substantial policy change (A); a tariff-only (B.1), services-only (B.2) or procurement-only agreement (B.3) and a comprehensive scenario, involving a full-fledged FTA covering tariffs, regulatory barriers for goods, services, investment and government procurement simultaneously, with a conservative and ambitious variant (respectively, C.1 and C.2). The comprehensive, ambitious option (C.2) estimated the effects of eliminating all duties, reducing NTMs on goods and services by 25 per cent and on government

procurement by 50 per cent. The study also notably included ‘spillover effects’, namely the impact of the TTIP on third parties (estimated to amount to 20 per cent of bilateral effects).

For the more limited scenarios, the hypothesised gains from liberalisation were very small.⁶ In the case of the comprehensive scenarios, however, the gains became more substantial. In the conservative scenario C.1, the projected GDP increase was 0.27 per cent for the EU. This went up to 0.48 per cent in the ambitious scenario C.2 – although only by the year 2027. It is this figure (rounded up to a half per cent) that is regularly mentioned in EU speeches and communication on the TTIP. Unsurprisingly, the Commission concluded, based on this analysis, that ‘there is a clear-cut case for the EU to enter into negotiations for a comprehensive and ambitious FTA (policy option C.2) as the preferred option’ (European Commission 2013: 58).

Figure 1 provides a breakdown of the gains that would accrue under policy option C.2 for the EU and the US by type of liberalisation. What becomes obvious from this figure is that by far the largest gains from the agreement come from the elimination of non-tariff barriers (NTBs) for goods and services. A whole 59 per cent of the total output gains for the EU (and 74 per cent for the US) depend on eliminating such impediments to trade between the EU and the US. Eliminating all tariffs, in turn, only accounts for 23 per cent of the output gains from the TTIP for the EU (and 11 per cent for the US). The final source of gain for both parties are so-called spillover effects. The agreement’s direct spillovers (that is, the effect that reduced trade barriers will have on third party exporters, who will find it easier to export to the EU and US) and indirect spillovers (the trade effects of other countries adopting common EU and US standards) account for respectively 14 and 3.5 per cent of the EU’s

modelled output gains (and 16 and -0.23 per cent in the case of the US, in the sense that indirect spillovers have a small negative impact on US output).

[insert Figure 1 about here]

How is this primary objective of eliminating NTBs to be achieved? Interestingly, the Commission's thinly veiled preference is for a MR of standards rather than the more extensive harmonisation of regulations. Indeed, this also appears to be the position of numerous business associations in the EU and the US, which have formed several transatlantic alliances to push for precisely this policy outcome (see Young and Peterson 2014: 172-6). In general, the Commission leaves the mode of regulatory convergence that will be pursued unspecified but on a number of occasions, a telling hint is given. In order to appreciate this, we turn to the largest sectoral beneficiary of the deal (motor vehicles) and the sector most negatively affected, electrical machinery.⁷ In both of these cases, the Commission is acknowledging that a strategy of pursuing MR may indeed be both more feasible and desirable than comprehensive regulatory harmonisation. Oddly enough, this is most obvious in the Impact Assessment when the Commission discusses the case of the 'losing' electrical machinery sector. Here, it concludes that 'the model reveals that regulatory alignment is harmful to EU industry because third countries would also benefit from the bilateral liberalisation in light of their comparative advantages' (European Commission 2013a: 41). The report then seeks to assuage the fears of the sector by stating that for this sector such negative spillover effects should not be of concern because 'the expected approach to be followed in the negotiations with the US would focus on regulatory coherence and a degree of *mutual recognition* between the EU and the US standards' (European Commission 2013a: 41, emphasis added). The Commission is thus directly

acknowledging that the mode of regulatory convergence that will be followed will be MR and not the harmonisation approach, because it is less harmful for the sector. A similar logic is reiterated in the case of motor vehicles, the largest beneficiary of an ambitious comprehensive agreement. Buried in a footnote, the Commission again notes that ‘it can reasonably be assumed that in reality the outcome of negotiations on the NTMs in certain sectors would rather result in bilateral than in *erga omnes* recognition of safety standards which are also of particular relevant [sic] for the motor vehicles sector [...] [in that case] the positive effect on output in the car sector could eventually be even bigger’ (European Commission 2013a: 43). In other words, not only is it more likely that MR instead of harmonisation will be pursued, but it can also be expected that MR will apply *bilaterally* and thus be limited to the TTIP parties, rather than benefitting all exporters to the EU and the US (i.e. what is known as *erga omnes* liberalisation, as applied in the case of the EU’s Single Market; see House of Lords 2013: 25).

What comes out of this discussion is that *bilateral* MR is preferable for the Commission because it actually results in more gains and fewer losses for certain EU exporters and EU import-competitors, regardless of the overall positive contribution that spillover effects make to EU output. In the following section, we turn to show how the CGE models underpinning the Commission’s impact assessment of the TTIP not only disguise the considerable uncertainties that surround the feasibility and mode of eliminating trade barriers across the Atlantic (which the Commission’s Impact Assessment hints at), but also illustrate how they allow it to downplay the negative consequences of MR.

5. The biases of CGE modelling in the case of the TTIP

Turning to the first of these issues, our argument is that the CGE models and the impact assessment, by failing to explicitly resolve the ambiguity between modes of liberalisation, obscure the uncertainty surrounding the TTIP's economic impact and exaggerate its potential benefits. In the studies on which the European Commission bases its optimistic expectations about the economic consequences of the TTIP, predictions about the extent to which 'regulatory divergence can be eliminated' or 'reduced' are central (e.g. ECORYS 2009: xiii). However, it is never specified *how* this will be achieved. The ECORYS Study explicitly states that 'the word "reduction" is used as an overall catch-phrase for possible approaches to address regulatory divergence and NTMs, like for example recognition of equivalence, MRAs, harmonisation of rules, common international standards development' (2009: 15). However, while it is convenient for modellers to conceive of these approaches as equivalent, and simply use a percentage of the regulatory differences that are expected to be reduced as a parameter for the model, they are in fact all but the same.

This is most obvious if we return to the issue of the prophesised 'spillover' gains from the TTIP. Whether the EU and the US will harmonise or mutually recognise each others' standards has considerable bearing on the degree to which other countries will find it easier to export to the EU and US (direct spillover effects) and whether they adopt common EU – US standards (indirect spillovers). In the case of MR, the incentives to undertake the latter are considerably reduced as no single transatlantic regulatory space would be created. As the Commission seems to prefer *bilateral* MR (which would restrict MR to producers from either of the TTIP partners) over *erga omnes* harmonisation, it may well be that only suppliers based in the EU or the US will have the advantage of only having to meet the standards on one side of the Atlantic, while third country firms will still have to comply with two different standards (see Rollo *et al.* 2013). Obscuring the different impact of

regulatory harmonisation and MR (as well as the difference between *erga omnes* and bilateral MR) and instead treating them as being equal is symptomatic of the fact that such studies allow the Commission and others to exaggerate the impact of liberalisation. Moreover, this ignores the very important *political* obstacles that may exist in the way of achieving the prophesised level of liberalisation.

To illustrate this last point, we need to consider the question of the feasibility of reducing non-tariff barriers to trade. The ambitious scenario in the impact assessment assumes that 25 per cent of all NTMs will be reduced. As only half of NTMs are actionable (European Commission 2013a: 6-7) – using a very generous interpretation of the term, which assumes that all barriers that *theoretically* could be addressed through policy measures are ‘actionable’⁸ – this would mean that 50 per cent of all trade barriers that can be affected by policy would be eliminated. Keeping in mind the lack of success in earlier attempts at regulatory cooperation between the EU and the US (see section 3), this seems like a very ambitious (and unrealistic) goal (see also Raza *et al.* 2014: vii-viii). For many sectors, regulatory philosophies and levels of protection are far apart and might be irreconcilable: the case of Genetically Modified Organisms (GMOs) is a case in point (see Pollack and Shaffer 2009). Leaving aside this particularly controversial bone of contention between the EU and the US, we can see that there are also considerable barriers in areas seen as key to realising the economic gains from the TTIP. In the area of chemicals, one of the key beneficiaries of TTIP liberalisation according to the CGE models and impact studies, the Commission’s own initial position paper for the negotiations noted ‘that neither full harmonisation nor mutual recognition seems feasible on the basis of the existing framework legislations in the US and EU: [these] are too different with regard to some fundamental principles’ (European Commission 2013b: 9).⁹ Even in areas where differences in standards

or conformity testing between the EU and the US seem uncontroversial, resulting merely from different historical practices, there are obstacles in the form of entrenched regulatory interests and multiple regulatory jurisdictions, especially in the US (as we discussed in section 3).

Perhaps most strikingly, in terms of highlighting the uncertainty of the gains surrounding the TTIP, the ECORYS model of the gains from NTM elimination is premised on important synergy effects. In the words of its authors, '[t]he sum of sector-specific gains in isolation is much less than the full economy-wide gains if NTMs are aligned' (ECORYS 2009: xxi). The numbers are striking: if liberalisation of NTMs occurs across all sectors at once, the gains in terms of increased income to the EU and US economy are €121.5 billion and €40.8 billion, respectively, compared to equivalent figures of *only* €30.8 billion and €13.5 billion if each sector is liberalised in isolation (ECORYS 2009: xxi-xxii). What this clearly shows is the importance of liberalisation *across* the board to realise the ambitious 'predictions' (read, fictional expectations) of the CGE models and which, as we have shown above, is unlikely to materialise. The abstract model and parameters downplay the fact that in practice, certain sectors that are central to achieving significant economic benefits are not ready for regulatory convergence, something that the Commission has quietly admitted in the impact assessment but is not recognised in the projections that are used to promote the TTIP.

Underlying these wildly optimistic numbers are some hefty CGE modelling biases. Of greatest relevance here is what we referred to above as the 'numerical' bias of such models, i.e. those relating to the calibration of the model that result from the fact that the selection of data is in the hands of the researcher. To see this we turn to a critical study of the CEPR and ECORYS models of the TTIP commissioned by the European United Left/Nordic Green Left

grouping in the European Parliament (EP) (commonly referred to as the 'Left Group') and conducted by the Austrian Foundation for Development Research. In this, Raza *et al.* (2014) have pointed to the fact that it is not only the political feasibility of the level of regulatory convergence that should be questioned, but also, more specifically, the estimations of the percentage of NTBs that are actionable and the trade-restrictiveness of these NTBs. These latter two estimations are to a large extent based on firms' *perceptions* of both NTB restrictiveness and the feasibility of removing them through an FTA (referred to as 'actionability'), with the ECORYS study's figures (on which the CEPR study is based) drawing on surveys of business representatives (ECORYS 2009: 10). As the authors of the critical study note, these individuals can be suspected to 'exhibit a tendency to overestimate actionability. Thus, the determination of actionability is basically a more or less sophisticated guess of a group of persons with vested interests' (Raza *et al.* 2014: 21). In the same way, business leaders might have a tendency to overestimate the business costs of non-tariff barriers. This questionable methodology used to generate input parameters for the CGE is not without consequences: the higher both indices, the larger the economic gains that the model will predict.

Disguising the mutual recognition agenda and its broader implications

Different modes of regulatory convergence do not only differ in terms of their economic effects. They also differ significantly in their effects on third countries (as explained above, projected positive spill-over effects on third countries crucially depend on their firms being able to also make use of MR arrangements) as well as on the level of regulation that will result from the agreement. By papering over these differences, the increase in economic efficiency by way of eliminating or reducing 'non-tariff barriers' can be presented without having to account for the effects of the chosen method on other policy objectives. As one of

the studies states itself, it 'does not judge whether a specific NTM is right or wrong or whether one system of regulation is better than the other. Instead the study focuses on identifying divergences in regulatory systems that cause additional costs or limit market access for foreign firms' (ECORYS 2009: xxxv). However, it is exactly this representation of regulations as 'non-tariff barriers' that allows to reduce them to mere economic parameters. As argued, the Commission itself indicates that bilateral MR (rather than harmonisation) is the most probable approach that will be taken in the TTIP. While this might be beneficial for transatlantic firms, in that it allows them to choose one of the regulatory regimes and export freely to the other entity, it may have a number of negative consequences in other, non-economic aspects. Bilateral MR without minimum harmonisation may lead to a 'race-to-the-bottom' in (or downgrading of) standards. The CGE model, by disguising the desired approach to regulatory convergence, thus obscures potentially difficult political trade-offs, and allows the Commission to portray the regulatory differences in pure economic terms as 'non-tariff barriers' that can be reduced by half.

This points to the broader 'analytical' and 'functional' 'biases' we highlighted earlier in our theoretical critique on CGE modelling. These result, respectively, from their general equilibrium modelling framework and propensity to model social and environmental costs within a single integrated framework. In this case, quite strikingly, modelling such costs 'ha[s] been neglected' *entirely* in the existing econometric studies of the agreement (Raza *et al.* 2014: vi). The propensity for such models to downplay non-economic costs and long-term macroeconomic and social adjustment processes resulting from trade liberalisation (which results from CGE's 'analytical' and 'functional' biases) is thus heightened, in line with the role of such modelling in the management of fictional expectations.

Indeed, the Austrian Foundation for Development Research's study of the TTIP modelling reveals that this overlooks the costs that may result from macroeconomic adjustment, including changes in the balance of the current account; losses of tariff revenue and the displacement of workers (which the CEPR study, following general equilibrium assumptions, claims will be temporary) (Raza *et al.* 2014: v-vi). Moreover, '[t]he social costs of regulatory change [resulting from the TTIP] can be substantial'. There are three elements to this. Firstly, alignment to a new standard may entail a 'short-term adjustment cost for public institutions and for firms'. Secondly, MR may imply greater 'information costs for consumers', who would now face 'a more complex and potentially less transparent multiplicity of permissible standards'. Thirdly, and most importantly, 'the elimination of NTMs will result in a potential welfare loss to society, in so far as this elimination threatens public policy goals (e.g. consumer safety, public health, environmental safety)' that are not addressed by other measures (Raza *et al.* 2014: vi). This is underscored by the possible inclusion of investor-state-dispute settlement (ISDS) provisions in the TTIP, which would allow firms to take national governments to private arbitration tribunals for supposed violations of their investor rights under the agreement. Aside from the costs this might entail in terms of the possible compensation payments mandated by such tribunals, it could also constrain regulators fearing the initiation of litigation – in what is known as 'regulatory chill' (Raza *et al.* 2014: vii). Such tribunals could also be said to 'provide significant advantages to multinational enterprises at the expense of governmental flexibility' by establishing a system of privatised transnational governance (Van Harten 2005: 600). In this vein, their potential inclusion in the TTIP also raises important implications for democratic decision-making (see Van Harten 2014).

Of course, saying there is a ‘potential’ for the TTIP to have such an effect is not the same as saying it *will* have this effect. To their credit, Raza and his colleagues are very intellectually honest in underlining that their findings with respect to the social costs of the agreement are ‘subject to considerable uncertainty’ (2014: iv, vii) – in marked contrast to the treatment of the findings of the CEPR and ECORYS studies by EU policymakers. In this vein, in one factsheet purporting to ‘explain’ the findings of the CGE models, the Commission described the CEPR study (which relies on ECORYS estimates for NTB elimination) as ‘state-of-the-art’ and its assumptions as ‘as reasonable as possible to make it as close to the real world as possible’, contrasting it to other models of the TTIP’s impact (European Commission 2013c: 2). The economists producing the key CEPR study have, moreover, also played their part in downplaying the uncertainty of their results. Neither the one-page ‘Key Findings’ section nor the executive summary that preface the text of the study come with any ‘health warnings’ about the results of the econometric modelling – beyond a brief acknowledgement in the latter of the political difficulties in eliminating NTBs (CEPR 2013: vii, 1-3). This and other such caveats, e.g. the difficulty in calculating data on NTBs, are buried in the text of the study *but*, as for the executive summary, do not interrogate the reliability of the modelling *per se* (CEPR 2013: 15, 19). Rather, the modelling assumptions on scenarios for NTB elimination are characterised as ‘relatively modest’ (CEPR 2013: 27), while the authors of the study emphasise the state of the art nature of their CGE modelling (CEPR 2013: 21-2), which is described as clearly preferable to more limited partial equilibrium modelling (CEPR 2013: 62-3).¹⁰ Moreover, the ‘Key Findings’ section – which is directly quoted in the European Commission press release accompanying the release of the study in March 2013 (European Commission 2013f) – only mentions the most ambitious modelling scenario (as do most public references to the study by the Commission).

In spite of the oft-catalogued limitations of general equilibrium analysis in describing the ‘real world’ (most notably the Sonnenschein-Mantel-Debreu theorem which axiomatically invalidates the earlier Arrow-Debreu theorem, see above) the numbers generated by such studies are thus clearly presented as carrying considerable weight by both policymakers and economists. In contrast, the *potential* social and environmental costs of the TTIP are downplayed in the language of the CGE model *precisely* because they cannot be as easily quantified. In the battle of managing ‘fictional expectations’, generating clear (yet problematic) results is likely to trump more uncertain conclusions. As the Commission notes in its factsheet on the modelling, ‘[a]lternatives to the CGE approach may have their merits but none has yet proven to be sufficiently reliable for ex ante analysis of economy-wide effects of trade policy changes’ (European Commission 2013c: 3).

6. Conclusions

This article has critically reviewed the econometric studies of the economic consequences of the TTIP contracted by the European Commission and, particularly, the discursive use of the former by the latter. It is on the back of these studies that the European Commission has built its communication strategy to promote the TTIP, trumpeting the half a per cent extra GDP or €545 additional purchasing power per average (EU) household. We have shown that these impact assessments should be seen as an exercise in ‘managing fictional expectations’ to convince the public and particular stakeholders of the desirability of a transatlantic market. When looking into the details of these forecasts, it becomes clear that they are not only based on very questionable assumptions (about, for example, the ‘actionability’ of regulatory differences and their trade-restrictiveness), but that these models have papered over many difficult, politically sensitive decisions. These mean that the large economic gains that have been touted are unlikely to be realised and that the TTIP may well negatively

affect regulatory protection in the EU. Our analysis has also suggested that the TTIP's approach to bilateral regulatory convergence may also fail to improve market conditions for third countries, as the Commission's narrative about the agreement's role in establishing 'global standards' and consequent positive spillover effects suggests (see European Commission 2013a: 31, 45; De Gucht 2014).

Besides offering a critical review of the likely impact of the TTIP, our article adds to the political economy literature in at least three ways. Firstly, we show how impact assessments based on assumption-sensitive CGE models might serve policy-makers by allowing them to 'manage fictional expectations', obscuring difficult detailed decisions that will have to be made during negotiations as well as potential negative effects for some groups. In this way, they can tailor their messages to specific audiences. For the TTIP, the Commission was able to emphasise 'growth and jobs', while obscuring the potentially deregulatory consequences of MR in the social and environmental field. Thus, in line with the 'ideational turn' in political economy, we argue that it is not objective consequences of trade agreements as such (which simply cannot be known for certain *a priori*), but the management of expectations about their effects, which affects the support for and opposition to the launch, conduct and conclusion of free trade negotiations. Secondly, this article adds to the literature on the different characteristics and effects of various modes of regulatory convergence in a transatlantic context (which has only begun to study the TTIP). In this vein, we have considered the different impact of harmonisation as opposed to MR (both bilateral and *erga omnes*). Finally, we hope to show how IPE might gain from more critical engagement with economics and quantification (more on which below).

We also hope that our critical review will allow for a more realistic, open and honest discussion on the potential benefits and costs (in economic and non-economic terms) of the TTIP, and contemporary FTAs in general. In this vein, our findings serve as a reminder of the limitations of CGE modelling. Where this has been used in the past to legitimate trade policy decisions, the prophesised gains have either not materialised (in the case of NAFTA) or have been revised downwards (in the case of the Doha Round) (Stanford 2003; Ackerman and Gallagher 2008). The former case is especially illustrative. Not only was there no real change in growth rates for the three North American economies in the decade after its conclusion (contrary to the expectations of significant GDP gains in some models) (Stanford 2003: 37), but the fluctuations in exports and economic performance observed did not match up to the model predictions (Shikher 2012) and could in fact be plausibly explained by factors other than trade liberalisation (Stanford 2003). That said, CGE models have also arguably helped spark a lively debate on the economic consequences of the Doha Round among WTO members (Scott 2008). A similar (albeit unintended) process can be observed in the case of the TTIP. Fears of a regulatory 'race-to-the-bottom', amongst other issues, have led to a major opposition campaign orchestrated by European civil society groups and a number of pan-European political parties (amongst them the European Greens and Left Group in the EP). These have staged several protests in Brussels and made the TTIP a campaign issue for the 2014 European elections (see, for example, the Greens' purpose-created website, <http://www.ttip2014.eu/>), putting the TTIP's advocates on the defensive.¹¹ Selling the TTIP thus remains central to the incoming Trade Commissioner's Cecilia Malmström's job, as spelled out in the new European Commission President Jean-Claude Juncker's mission letter for the Trade portfolio: 'Every effort should be made to maximise the positive contribution of our trade policy [...] and to explain and demonstrate its benefits to citizens and stakeholders at all levels' (European Commission 2014: 4).

As a result, what is particularly welcome from our perspective is that these groups have also begun to critique the economistic rhetoric of many of the TTIP's advocates by producing their own reports and 'Factsheets' on the economic modelling often elaborated in defence of the TTIP (e.g. Raza *et al.* 2014; AK Europa 2013). The 'black box' of CGE modelling is beginning to look a lot less impenetrable, which can only be good for the quality of public discussion on trade policy issues. In this vein, and referring back to our theoretical contribution, our article also suggests the importance of engaging critically with quantification in economics and the social sciences more broadly, rather than simply dismissing its value as an instrument of scholarly inquiry, as has often been the case in some areas of 'critical' IPE (see Underhill 2009: 350-5). Challenging neoclassical economics in public discourse often does require that we understand and engage with its specific methodological and analytical tools (including econometric modelling),¹² especially when these are so central to its broader political appeal, and that we enlist the help of economists in doing so.

Notes

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¹ While there were a few other econometric studies of the TTIP (e.g. CEPII 2013; Bertelsmann and IFO 2013), in this article we focus on the two aforementioned studies at the centre of the Commission's information campaign. Indeed, the Commission explicitly justified its reliance on these by stating that they were at the 'mid-range of most other studies' and thus represented 'conservative' estimates (European Commission 2013c: 3)

² We should stress, at this stage, that while we draw on literature that is critical of CGE modelling, our aim is not to engage in a detailed economic *critique* of such models or generate alternative figures. Rather, we suggest that they generate 'fictional expectations' – i.e. ones underpinned by considerable uncertainty, as noted above – containing particular biases; in other words, they represent an exercise in the 'management of fictional expectations', regardless of the accuracy of their predictions. As Beckert (2013a: 226, emphasis in the original) notes they are '*necessarily* wrong because the future cannot be foreseen' in an inherently uncertain social world.

³ Telecommunications, medical devices, electromagnetic compatibility, electrical safety, recreational craft and pharmaceuticals.

⁴ These efforts included the adoption of non-binding Guidelines for Regulatory Cooperation in 2002 and more substantive 'Roadmaps for US-EU Regulatory Cooperation' in 2004 and 2005. These led to the establishment of a high-level Regulatory Cooperation Forum that was intended to bring progress through, *inter alia*, a US-EU experts exchange programme and the identification of some 15 sectoral priority areas for the future (Lester and Barbee 2013: 850). The latest initiative before the TTIP, the Framework for Advancing Transatlantic Economic Integration (FATEI), established the Transatlantic Economic Council (TEC), which consists of several relevant European Commissioners and US Secretaries, including the US Trade Representative (USTR), and sought to bring new high-level political ownership to the process (Lütz 2011: vii-ix).

⁵ The wording is even clearer with regard to the US in that ‘no more “traditional” type MRAs should be concluded with the US’ (European Commission 2004: 9).

⁶ Scenario A. assumes no changes in trade policy and hence stipulates no effects on trade and GDP. Under scenario B.1, EU GDP would rise by 0.10 per cent, in B.2 by only 0.01 per cent and in B.3 by 0.02 per cent.

⁷ The motor vehicle industry accounts for 43 per cent of the projected export increases from the TTIP for the EU and would see its overall output increase by 1.54 per cent in the ambitious scenario – while the electrical machinery sector is expected to have output contract by 7.28 per cent, more than any other of the sectors considered.

⁸ As stated in the Impact Assessment Report: ‘[an] NTM was considered ‘actionable’ only when it is within the reach of policy to eliminate it or to find remedies for reducing its negative effect on trade. In some cases this is not possible. For example, barriers to market access that are associated with differences in consumer preferences are unlikely to be lifted by policy intervention’ (European Commission 2013a: 6-7).

⁹ Indeed, even the impact assessment itself anticipates a more modest agreement by highlighting that ‘[i]n order to be able to adapt to future evolutions, an ambitious agreement with regard to regulatory coherence would have to be of a “living nature”. Regulatory obstacles to trade that cannot be eliminated or reduced in a first phase should continue to be discussed under clear time lines following an institutionalised mechanism’ (European Commission 2013a: 28).

¹⁰ Similarly, while the authors note that their assumptions regarding spillover effects ‘hinge’ on a certain form of EU-US regulatory convergence (CEPR 2013: 81), these are never questioned in the text of the study.

¹¹ On this, see for example the House of Lords’ European Union Committee report on the TTIP, which argues that there needs to be a renewed push to communicate the benefits of the agreement as ‘[i]nsofar as a public debate on TTIP exists, EU Member States are losing it. In part this is because they are engaging in it fitfully and invariably on the back foot’ (House of Lords 2014: 72).

¹² In this vein, for example, Vishaal Kishore (2014) exposes the ‘economic fiction’ of the case for free trade, while Matthew Watson (2014) challenges the economics behind financial modelling.

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References

- Abdelal, R., Blyth, M. and Parsons, C. (eds) (2010), *Constructing the International Economy* (Ithaca, NY: Cornell University Press).
- Ackerman, F. (2004), ‘Still dead after all these years: interpreting the failure of general equilibrium theory’, in Ackerman, F. and Nadal, A. (eds) (2004) *The Flawed*

- Foundations of General Equilibrium: Critical Essays on Economic Theory* (Abingdon: Routledge), pp. 14-32.
- Ackerman, F. and Gallagher, K. (2004), 'Computable Abstraction: General Equilibrium Models of Trade and Environment', in Ackerman, F. and Nadal, A. (eds) (2004) *The Flawed Foundations of General Equilibrium: Critical Essays on Economic Theory* (Abingdon: Routledge), pp. 168-80.
- Ackerman, F. and Gallagher, K. (2008), 'The Shrinking Gains from Global Trade Liberalization in Computable General Equilibrium Models: A Critical Assessment', *International Journal of Political Economy*, 37 (1), pp. 50-77.
- Ackerman, F. and Nadal, A. (eds) (2004) *The Flawed Foundations of General Equilibrium: Critical Essays on Economic Theory* (Abingdon: Routledge).
- AK Europa (2013), 'Transatlantic Trade and Investment Partnership (TTIP): A Critical Orientation Guide for the Better Understanding of the Economic Impact Assessments of the Trade and Investment Agreement between the USA and the EU', December, Brussels: Austrian Federal Chamber of Labour (Brussels Office). Available from: http://www.akeuropa.eu/_includes/mods/akeu/docs/main_report_en_325.pdf [accessed 12 May 2014].
- Akerlof (1970), 'The Market for "Lemons": Quality Uncertainty and the Market Mechanism', *Quarterly Journal of Economics*, 84 (3), pp. 488-500.
- Arrow, K. and Debreu, G. (1954), 'Existence of an Equilibrium for a Competitive Economy', *Econometrica*, 22 (3), pp. 265-90.
- BBC News (2013), 'EU and US "in biggest trade deal"', *BBC News*, 17 June. Available from: <http://www.bbc.co.uk/news/business-22943170> [accessed 3 March 2014].
- Beckert, J. (1996), 'What is Sociological about Economic Sociology? Uncertainty and the Embeddedness of Economic Action', *Theory and Society*, 25 (6), pp. 803-40.

- Beckert, J. (1997), *Grenzen des Marktes: Die Sozialen Grundlagen Wirtschaftlicher Effizienz* (Frankfurt a.M.: Campus).
- Beckert, J. (2013a), 'Imagined Futures: Fictional Expectations in the Economy', *Theory and Society*, 42 (2), pp. 219-40.
- Beckert, J. (2013b), 'Capitalism as a System of Expectations: Toward a Sociological Microfoundation of Political Economy', *Politics and Society*, 41 (3), pp. 323-50.
- Bell, S.D. (2011), 'Do We Really Need a New "Constructivist Institutionalism"?', *British Journal of Political Science*, 41 (4), pp. 883-906.
- Bertelsmann and IFO (2013) *Transatlantic Trade and Investment Partnership: Who Benefits from a Free Trade Deal*. Bertelsmann Stiftung and IFO Institute. Available from: <http://www.bfna.org/publication/transatlantic-trade-and-investment-partnership-ttip-who-benefits-from-a-free-trade-deal> [accessed 25 May 2014].
- Bieler, A. and Morton, A.D. (2008), 'The Deficits of Discourse in IPE: Turning Base Metal into Gold?', *International Studies Quarterly*, 52 (1), pp. 103-28.
- Bignami, F. and Charnovitz, S. (2001), 'Transatlantic Civil Society Dialogues', in Pollack, M.A. and Shaffer, G.C. (eds), *Transatlantic Governance in the Global Economy* (Lanham, MD: Rowman & Littlefield), pp. 255-284.
- Blyth, M. (2002), *Great Transformations: Economic Ideas and Political Change in the Twentieth Century* (Cambridge: Cambridge University Press).
- Blyth, M. (2009), 'Torn Between Two Lovers? Caught in the Middle of British and American IPE', *New Political Economy*, 14 (3), pp. 329-36.
- Blyth, M. (2010), 'Ideas, Uncertainty and Evolution', in D. Béland and R.H. Cox (eds), *Ideas and Politics in Social Science Research* (Oxford: Oxford University Press), pp. 83-100.

- Böhringer, C. and Löschel, A. (2006), 'Computable General Equilibrium Models for Sustainability Impact Assessments: Status Quo and Prospects', *Ecological Economics* 60 (1), pp. 49-64.
- CEE Bankwatch Network, Climate Action Network Europe, Corporate Europe Observatory, European Public Health Alliance, European Environmental Bureau, Friends of the Earth Europe, Health and Environmental Alliance, Nature Friends International, Transport and Environment and World Wide Fund for Nature (2014), 'TTIP Puts the EU's Environmental and Social Policies on the Line', *EurActiv*, 13 January. Available from: <http://www.euractiv.com/trade/ttip-puts-eus-environmental-soci-analysis-532724> [accessed 23 May 2014].
- CEPII (2013) *Transatlantic Trade: Whither Partnership, Which Economic Consequences?* Policy Brief No.1 – September 2013. Available from: <http://www.cepii.fr/CEPII/fr/publications/pb/abstract.asp?NoDoc=6113> [accessed 25 May 2014].
- CEPR (2013), 'Reducing Transatlantic Barriers to Trade and Investment: An Economic Assessment', London: CEPR.
- Clarke, K. (2014), 'Press on to a Trans-Atlantic Trade Pact', *Wall Street Journal*, 18 February. Available from: <http://online.wsj.com/news/articles/SB40001424052702303945704579390652699572572> [accessed 3 March 2014].
- Convert, B. and Heilbron, J. (2005), 'La Réinvention Américaine de la Sociologie Économique', *L'Année Sociologique*, 55 (2), pp. 329-64.
- Cohen, B.J. (2007), 'The Transatlantic Divide: Why are American and British IPE So Different?', *Review of International Political Economy*, 14 (2), pp. 197-219.

- Cypher, J.M. (1993), 'The Ideology of Economic Science in the Selling of NAFTA: The Political Economy of Elite Decision-Making', *Review of Radical Political Economies*, 25 (4), pp. 146-64.
- De Ville, F. and Orbie, J. (2014), 'The European Commission's Neoliberal Trade Discourse since the Crisis: Legitimising Continuity Through Subtle Discursive Change', *British Journal of Politics and International Relations*, 16 (1), pp. 149-67.
- De Ville, F. and Siles-Brügge, G. (2014), 'As Smokescreen Clears, Time for More Honesty on EU-US Trade Pact', *Manchester Policy Blogs*, 27 January. Available from: <http://blog.policy.manchester.ac.uk/other/2014/01/as-the-smokescreen-clears-time-for-more-honesty-on-eu-us-trade-pact/> [accessed 3 March 2014].
- Decanio, S.J. (2005), 'Descriptive or Conceptual Models? Contributions of Economics to the Climate Policy Debate', *International Environmental Agreements*, 5 (4), pp. 415-27.
- De Gucht, K. (2013), 'A European Perspective on Transatlantic Free Trade', speech delivered to the European Conference at Harvard Kennedy School, 2 March. Available from: http://europa.eu/rapid/press-release_SPEECH-13-178_en.htm [accessed 25 May 2014].
- De Gucht, K. (2014), 'Towards the Transatlantic Trade and Investment Partnership: Stepping up a Gear', speech delivered to the Atlantic Council, Washington DC, 18 February. Available from: http://trade.ec.europa.eu/doclib/docs/2014/february/tradoc_152197.pdf [accessed 3 March 2014].
- Dixon, P.B and Rimmer, M.T. (2010), 'Johansen's Contribution to CGE Modelling: Originator and Guiding Light for 50 Years', paper presented to the Symposium in Memory of Professor Leif Johansen and to celebrate the fiftieth anniversary of the publication of

his 'A Multi-Sectoral Study of Economic Growth', The Norwegian Academy of Science and Letters, 20-21 May.

ECORYS (2009), 'Non-tariff Measures in EU-US Trade and Investment - An Economic Analysis', Rotterdam: Ecorys Nederland BV.

European Commission (2004), 'Priorities for Bilateral/Regional Trade Related Activities in the field of Mutual Recognition Agreements for Industrial Products and Related Technical Dialogue', SEC(2004)1072, Brussels: European Commission.

European Commission (2013a), 'European Commission Staff Working Document: Impact Assessment Report on the future of EU-US trade relations', SWD(2013) 68 final, Brussels: European Commission.

European Commission (2013b), 'Note for the Attention of the Trade Policy Committee: Initial Position Papers on: Regulatory Issues - Cross-Cutting Disciplines and Institutional Provisions; Technical Barriers to Trade; Regulatory Cluster: automotive sector, chemicals, pharmaceuticals; Sanitary and Phytosanitary issues (SPS); Trade and Sustainable Development; Anti-Trust & Mergers, Government Influence and Subsidies; Trade and Investment in Raw Materials and Energy', m.d. 238/13, 20 June. Brussels: European Commission.

European Commission (2013c), 'Transatlantic Trade and Investment Partnership: The Economic Analysis Explained', September 2013. Available from: http://trade.ec.europa.eu/doclib/docs/2013/september/tradoc_151787.pdf [accessed 13 May 2014].

European Commission (2013d), 'Issues paper Communicating on TTIP - Areas for cooperation between the Commission services and Member States', 7 November, Brussels: European Commission. Available from:

<http://corporateeurope.org/trade/2013/11/leaked-european-commission-pr-strategy-communicating-ttip> [accessed 3 March 2014].

European Commission (2013e), 'Questions and Answers: Transatlantic Trade and Investment Partnership', last updated 20 December. Available from: <http://ec.europa.eu/trade/policy/in-focus/ttip/questions-and-answers/> [accessed 3 March 2014].

European Commission (2013f), 'Independent Study Outlines Benefits of EU-US Trade Agreement', press release, 12 March. Available from: http://europa.eu/rapid/press-release_MEMO-13-211_en.htm [accessed 3 October 2014].

European Commission (2014), 'Mission Letter: Commissioner for Trade', 10 September. Available from: http://ec.europa.eu/about/juncker-commission/docs/malmstrom_en.pdf [accessed 3 October 2014].

Featherstone, K. and Ginsberg, R. (1996), *The United States and the European Community in the 1990s* (London: Macmillan).

Fine, B. (1999), 'A Question of Economics: Is It Colonizing the Social Sciences?', *Economy and Society*, 28 (3), pp. 403-25.

Fioramonti, L. (2014), *How Numbers Rule the World: The Use and Abuse of Statistics in Global Politics* (London: Zed).

Fröhlich, S. (2012) *The New Geopolitics of Transatlantic Relations* (Washington, D.C.: Woodrow Wilson Center Press).

George, C. (2010), *The Truth About Trade: The Real Impact of Liberalization* (London: Zed).

Grassini, M. (2007), 'Rowing along the Computable General Equilibrium Modelling Mainstream', *Studi e Note di Economia*, 12 (3), pp. 315-43.

Grahl, J. and Teague, P. (1990), *The Big Market: The Future of the European Community* (London: Lawrence and Wishart).

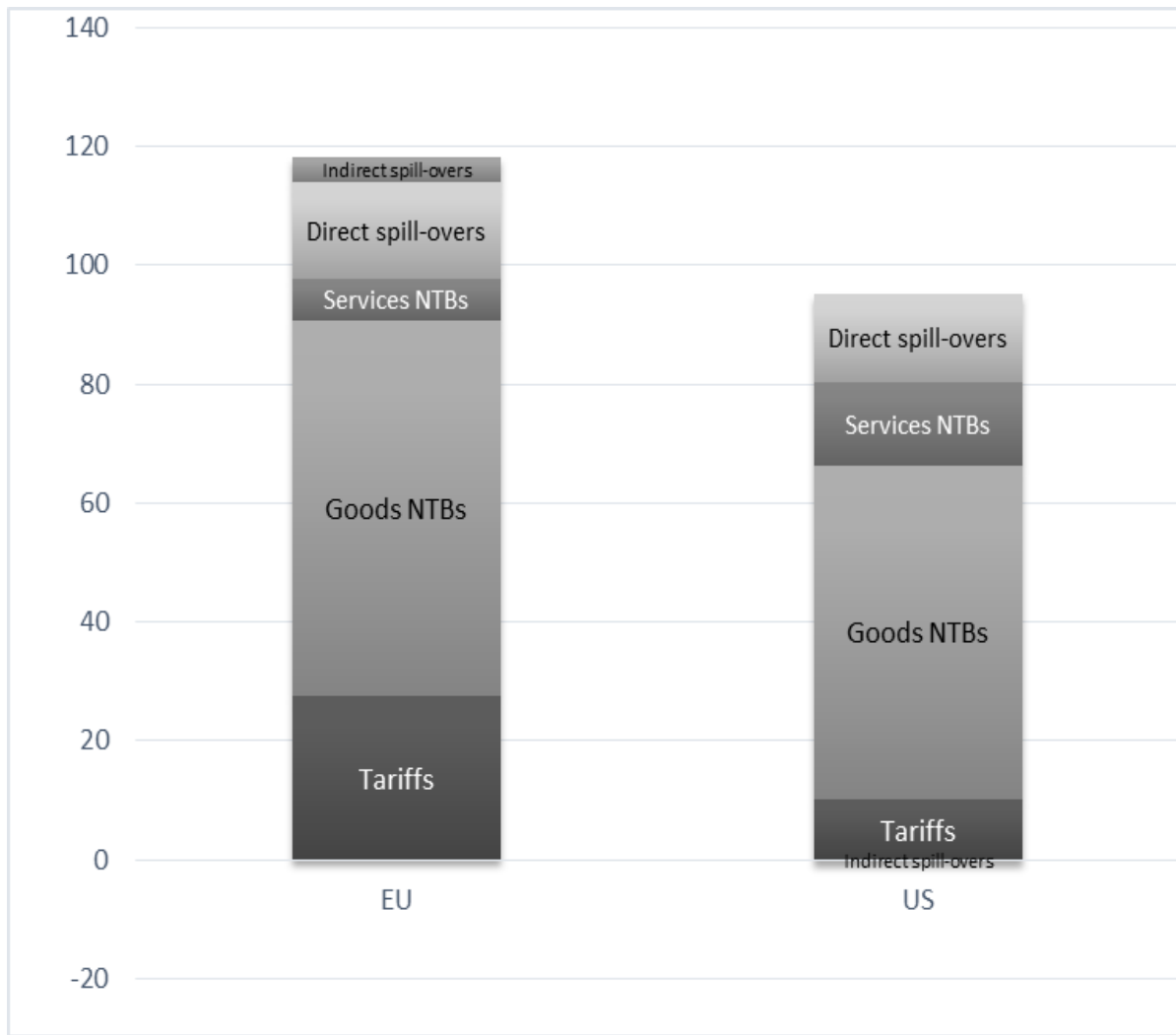
- Hanson, D. and Laitner, J.A. (2004), 'An Integrated Analysis of Policies that Increase Investments in Advanced Energy-Efficient/Low-Carbon Technologies', *Energy Economics* 26 (4), pp. 739-755.
- Hay, C. and Rosamond, B. (2002), 'Globalisation, European Integration and the Discursive Construction of Economic Imperatives', *Journal of European Public Policy*, 9 (2), pp. 147-67.
- HLWG (2013), 'Final Report: High Level Working Group on Growth and Jobs', 11 February. Available from: http://trade.ec.europa.eu/doclib/docs/2013/february/tradoc_150519.pdf [accessed 17 May 2014].
- House of Lords (2013), *Inquiry on Transatlantic Trade and Investment Partnership: Evidence Session No. 2 (Questions 9-22), Thursday 31 October, 2013, 10.30am* (London: The Stationery Office).
- House of Lords (2014), *The Transatlantic Trade and Investment Partnership*, European Union Committee, 14th Report of Session 2013-14 (London: The Stationery Office).
- Johansen, L. (1960), *A Multi-Sectoral Study of Economic Growth* (Amsterdam: North-Holland Publishing Company).
- Kemfert, C. (2002), 'An Integrated Assessment Model of Economy-Energy-Climate – The Model WIAGEM', *Integrated Assessment*, 3 (4), pp. 281-98.
- Kirkpatrick, C., Lee, N., Morrissey, O. (1999), 'WTO New Round: Sustainability Impact Assessment Study, Phase One Report', Institute for Development Policy and Management, Manchester: University of Manchester.
- Kishore, V. (2014), *Ricardo's Gauntlet: Economic Fiction and the Flawed Case for Free Trade* (London: Anthem Press).

- Lester, S. and Barbee, I. (2013) 'The Challenge of Cooperation: Regulatory Trade Barriers in the Transatlantic Trade and Investment Partnership', *Journal of International Economic Law*, 16(4): 847-867.
- Lütz, S. (2011) 'Back to the Future? The Domestic Sources of Transatlantic Regulation', *Review of International Political Economy*, 18(4): iii-xxii.
- McKittrick, R. (1998), 'The Econometric Critique of Computable General Equilibrium Modeling: The Role of Functional Forms', *Economic Modelling*, 15 (4), pp. 543-73.
- Nicolaïdis, K. (1996), 'Mutual Recognition of Regulatory Regimes: Some Lessons and Prospects', in *Regulatory Reform and International Market Openness*, Paris: OECD.
- Nicolaïdis, K. and Shaffer, G. (2005), 'Transnational Mutual Recognition Regimes: Governance without Global Government', *Law and Contemporary Problems*, 68 (2), pp. 263-317.
- Parker, G. and Houlder, V. (2013), 'EU-US Trade Talks Launched Amid French Fury at Brussels', *Financial Times*, 17 June. Available from: <http://www.ft.com/cms/s/0/a785d93c-d73d-11e2-8279-00144feab7de.html#axzz2uvJiaw1v> [accessed 3 March 2014].
- Peterson, J. (1996), *Europe and America: The Prospects for Partnership* (London: Routledge).
- Peterson, J., Doherty, R., Van Cutsem, M., Wallace, H., Epstein, R., Burwell, F., Pollack, M.A., Quinlan, J.P., Young, A.R. (2004), 'Review of the Framework for Relations between the European Union and the United States: An Independent Study (Final Report)', Brussels: European Commission.
- Piermantini, R. and Teh, R. (2005), 'Demystifying Modeling Methods for Trade Policy', WTO Discussion Papers, No. 10. Geneva: WTO.
- Poiarés Maduro, M. (2007), 'So Close and Yet So Far: The Paradoxes of Mutual Recognition', *Journal of European Public Policy*, 14 (5), pp. 814-25.

- Pollack, M.A. (2003), 'The Political Economy of Transatlantic Trade Disputes', in Petersmann, E.U. and Pollack, M.A. (eds), *Transatlantic Trade Disputes: The US, the EU and the WTO* (Oxford: Oxford University Press), pp. 65-118.
- Pollack, M.A. (2005), 'The New Transatlantic Agenda at Ten: Reflections on an Experiment in International Governance', *Journal of Common Market Studies*, 43 (5), pp. 899-919.
- Pollack, M.A. and Shaffer, G.C. (2001), *Transatlantic Governance in the Global Economy* (Lanham, MD: Rowman & Littlefield).
- Pollack, M.A. and Shaffer, G.C. (2009), *When Cooperation Fails: The International Law and Politics of Genetically Modified Foods* (Oxford: Oxford University Press).
- Raza, W., Grumiller, J, Taylor, L., Tröster, B., von Arnim, R. (2014) 'Assess TTIP: Assessing the Claimed Benefits of the Transatlantic Trade and Investment Partnership'. Vienna: Austrian Foundation for Development Research.
- Rollo, J., Holmes, P., Parra, M.M. and Ollerenshaw, S. (2013), 'Potential Effects of the EU-US Economic Integration on Selected Developing Countries', *GREAT Insights*, 2 (8), pp. 14-16.
- Schmidt, S.K. (2007), 'Mutual Recognition as a New Mode of Governance', *Journal of European Public Policy*, 14 (5), pp. 667-681.
- Schmidt, V. (2002), *The Futures of European Capitalism* (Oxford: Oxford University Press).
- Scott, J. (2008), 'The Use and Misuse of Trade Negotiation Simulations', *Journal of World Trade*, 42 (1), pp. 87-103.
- Scott, J. and Wilkinson, R. (2012), 'Changing of the Guard: Expert Knowledge and "Common Sense" in the Doha Development Round', Brookes World Poverty Institute Working (BWPI) Paper No. 166, Manchester: BWPI.
- Scrieciu, S.S. (2007), 'The Inherent Dangers of Using Computable General Equilibrium Models as a Single Integrated Modelling Framework For Sustainability Impact

- Assessment. A Critical Note on Böhringer and Löschel (2006)', *Ecological Economics*, 60 (4), pp. 678-84.
- Shikher, S. (2012), 'Predicting the Effects of NAFTA: Now We Can Do It Better!', *Journal of International and Global Economic Studies*, 5 (2), pp. 32-59.
- Siles-Brügge, G. (2014), *Constructing European Union Trade Policy: A Global Idea of Europe* (Basingstoke: Palgrave Macmillan).
- Smith, M. (2009), 'Transatlantic Economic Relations in a Changing Global Political Economy: Achieving Togetherness but Missing the Bus', *The British Journal of Politics and International Relations*, 11 (1), pp. 94-107.
- Stanford, J. (2003), 'Economic Models and Economic Reality: North American Free Trade and the Predictions of Economists', *International Journal of Political Economy*, 33 (3), pp. 28-49.
- Steffenson, R. (2005), *Managing EU-US Relations: Actors, Institutions and the New Transatlantic Agenda* (Manchester: Manchester University Press).
- Taylor, L. and von Arnim, R. (2006), 'Modelling the Impact of Trade Liberalisation: A Critique of Computable General Equilibrium Models', Oxfam Research Report, July. Oxford: Oxfam International.
- Thissen (1998), 'A Classification of Empirical CGE Modelling', SOM Research Report 99C01, University of Groningen, The Netherlands.
- Trachtman, J.P. (2007), 'Embedding Mutual Recognition at the WTO', *Journal of European Public Policy*, 14 (5), pp. 780-799.
- Underhill, G. (2009), 'Political Economy, the "US School", and the Manifest Destiny of Everyone Else', *New Political Economy*, 14 (3), pp. 347-56.

- Van Harten, G. (2005), 'Private Authority and Transnational Governance: The Contours of the International System of Investor Protection', *Review of International Political Economy*, 12 (4), pp. 600-23.
- Van Harten, G. (2014), 'Comments on the European Commission's Approach to Investor-State Arbitration in TTIP and CETA', Legal Studies Research Paper Series, Research Paper nr 59, Osgoode Hall Law School. Available from: http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2466688 [accessed 5 October 2014].
- Watson, M. and Hay, C. (2003), 'The Discourse of Globalisation and the Logic of No Alternative: Rendering the Contingent Necessary in the Political Economy of New Labour', *Policy & Politics*, 31 (3), pp. 289-305.
- Watson, M. (2014), *Uneconomic Economics and the Crisis of the Model World* (Basingstoke: Palgrave Macmillan).
- Young, A.R. and Peterson, J. (2014), *Parochial Global Europe: 21st Century Trade Politics* (Oxford: Oxford University Press).



Source: CEPR (2013: 47), Table 17.

Figure 1 – Breaking down the gains from the TTIP, in €bn (2013 CEPR study, ambitious regulatory convergence scenario)